Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	196	photorhabdus	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/05 15:51
L2	4244	tcd$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/05 15:51
L3	505	tcd$ and toxin	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/05 15:51

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FILE 'HOME' ENTERED AT 14:49:38 ON 05 JAN 2006

=> file biosis caplus caba agricola

=> s tcd?
L1       17452 TCD?

=> s tcdb? or tcdA?
L2         288 TCDB? OR TCDA?

=> duplicate remove l2

L3          202 DUPLICATE REMOVE L2 (86 DUPLICATES REMOVED)

=> d ti 1-50

L3   ANSWER 1 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Facile method to detect oligonucleotides with functionalized
     polydiacetylene vesicles

L3   ANSWER 2 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Insecticidal toxin complex fusion proteins and their use in transformation
     of plants for improved insect resistance

L3   ANSWER 3 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Use of untranslated regions of the osmotin gene to increase levels of
     transgene expression in plants

L3   ANSWER 4 OF 202  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
TI   Multilocus sequence analysis and comparative evolution of
     virulence-associated genes and housekeeping genes of Clostridium
     difficile.

L3   ANSWER 5 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Prevalence of the ermB gene in Clostridium difficile strains isolated at a
     University Teaching Hospital from 1987 through 1998

L3   ANSWER 6 OF 202  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
TI   Absolute quantification in dopaminergic neurotransmission SPECT using a
     Monte Carlo-based scatter correction and fully 3-dimensional
     reconstruction.

L3   ANSWER 7 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Controlled Polymerization of Substituted Diacetylene Self-Organized
     Monolayers Confined in Molecule Corrals

L3   ANSWER 8 OF 202  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
TI   LuxS/autoinducer-2 quorum sensing molecule regulates transcriptional
     virulence gene expression in Clostridium difficile.

L3   ANSWER 9 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Controlled polymerization of substituted diacetylene self-assembled
     monolayers confined in molecule corrals

L3   ANSWER 10 OF 202  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Clonal spread of a Clostridium difficile strain with a complete set of
     toxin A, toxin B, and binary toxin genes among Polish patients with
     Clostridium difficile-associated diarrhea

L3   ANSWER 11 OF 202  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
TI   Potentiation and cellular phenotypes of the insecticidal Toxin complexes
     of Photorhabdus bacteria.

L3   ANSWER 12 OF 202  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
TI   Clostridium difficile in emergency room.
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L3 ANSWER 13 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Clostridium difficile toxins: Mechanism of action and role in disease.

L3 ANSWER 14 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Characterization of the cleavage site and function of resulting cleavage fragments after limited proteolysis of Clostridium difficile toxin B (**TcdB**) by host cells.

L3 ANSWER 15 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI A survey of metronidazole and vancomycin resistance in strains of Clostridium difficile isolated in Warsaw, Poland.

L3 ANSWER 16 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Coexistence of multiple PCR-ribotype stains of Clostrdium difficile in faecal samples limits epidemioligical.

L3 ANSWER 17 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Statins potentiate the IFN-gamma-induced upregulation of group IIA phospholipase A(2) in human aortic smooth muscle cells and HepG2 hepatoma cells.

L3 ANSWER 18 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Detection of binary-toxin genes (cdtA and cdtB) among Clostridium difficile strains isolated from patients with C. difficile-associated diarrhoea (CDAD) in Poland

L3 ANSWER 19 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Effect of phage infection on toxin production by Clostridium difficile.

L3 ANSWER 20 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Up-regulation of RhoB protein by glucosylating toxins.

L3 ANSWER 21 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI The catalytic domain of native large clostridial cytotoxins escapes antitoxin detection.

L3 ANSWER 22 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Difference in the protein substrate specificity between Clostridium sordellii lethal toxin and variant Clostridium difficile toxin B 1470.

L3 ANSWER 23 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Revised nomenclature of Clostridium difficile toxins and associated genes

L3 ANSWER 24 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Detection of Clostridium difficile and its toxin A (**TcdA**) in stool specimens from hospitalised patients.

L3 ANSWER 25 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Transferase-dependent and -independent effects of clostridium difficile toxin A on inflammatory genes of HMC-1 mast cells.

L3 ANSWER 26 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Involvement of p38 mapk in Clostridium difficile toxin B-induced activation of human mast cells.

L3 ANSWER 27 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Transgenic plants expressing photorhabdus toxin.

L3 ANSWER 28 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Combinations of insecticidal proteins from Xenorhabdus, Photorhabdus, and Paenibacillus for broad range control of insects

L3 ANSWER 29 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI DNA sequences from tcd genomic region of Photorhabdus luminescens and their use for production of recombinant, orally-active insect toxins

L3 ANSWER 30 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Pesticidal proteins active against Lepidoptera and the genes encoding them from Paenibacillus species

L3 ANSWER 31 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Non-toxic antigenic mutant/modified Clostridium difficile **TcdB** toxin polypeptides, their sequences, recombinant production, and use in constructing vaccines for treatment of infections

L3 ANSWER 32 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 10
TI Multiplex PCR targeting tpi (triose phosphate isomerase), **tcdA** (toxin A), and **tcdB** (toxin B) genes for toxigenic culture of Clostridium difficile

L3 ANSWER 33 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Template-Induced Inclusion Structures with Copper(II) Phthalocyanine and Coronene as Guests in Two-Dimensional Hydrogen-Bonded Host Networks

L3 ANSWER 34 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Community-acquired Clostridium difficile diarrhea caused by binary toxin, toxin A, and toxin B gene-positive isolates in Hungary

L3 ANSWER 35 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 11
TI Multilocus sequence typing analysis of human and animal Clostridium difficile isolates of various toxigenic types

L3 ANSWER 36 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Prevalence and characterization of a binary toxin (actin-specific ADP-ribosyltransferase) from Clostridium difficile

L3 ANSWER 37 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Characterization of toxin A-negative, toxin B-positive Clostridium difficile isolates from outbreaks in different countries by amplified fragment length polymorphism and PCR ribotyping

L3 ANSWER 38 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Distribution of Clostridium difficile variant toxinotypes and strains with binary toxin genes among clinical isolates in an American hospital.

L3 ANSWER 39 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Constrained Geometry Tetramethylcyclopentadienyl-phenoxytitanium Dichlorides: Template Synthesis, Structures, and Catalytic Properties for Ethylene Polymerization

L3 ANSWER 40 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Water resistance and optical properties of optical adhesives containing strong hydrophobic components

L3 ANSWER 41 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Aryl hydrocarbon receptor response to indigoids in vitro and in vivo.

L3 ANSWER 42 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Cloning and expression of Clostridium difficile toxin A gene (**tcdA**) by PCR amplification and use of an expression vector.

L3 ANSWER 43 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation onSTN
TI Allo-antigen expression on both APCS and tumor is required to elicit an effective GVL response after experimental allogeneic BMT.

L3 ANSWER 44 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Cytotoxicity and antimicrobial susceptibility of Clostridium difficile isolated from hospitalized children with acute diarrhea

L3 ANSWER 45 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation onSTN
TI Rapid diagnosis of Clostridium difficile-associated diarrhea using

real-time PCR.

L3 ANSWER 46 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation onSTN
TI Comparative study of thermoresistance spores of Clostridium diffiicle strains belonging to the different toxigenicity groups.
Original Title: Porownanie termorezystencji spor szczepow Clostridium difficile o roznym profilu toksynotworczosci..

L3 ANSWER 47 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Transport genes of Chromobacterium violaceum: an overview

L3 ANSWER 48 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI The IStron CdISt1 of Clostridium difficile: molecular symbiosis of a group I intron and an insertion element.

L3 ANSWER 49 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
TI Chromatic immunoassay based on polydiacetylene vesicles

L3 ANSWER 50 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation onSTN
TI Immunodiagnosis of Clostridium difficile infection.

=> d bib abs 27 28 11

L3 ANSWER 27 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation onSTN
AN 2004:249658 BIOSIS
DN PREV200400249612
TI Transgenic plants expressing photorhabdus toxin.
AU Petell, James K. [Inventor, Reprint Author]; Merlo, Donald J. [Inventor]; Herman, Rod A. [Inventor]; Roberts, Jean L. [Inventor]; Guo, Lining [Inventor]; Schafer, Barry W. [Inventor]; Sukhapinda, Kitisri [Inventor]; Merlo, Ann Owens [Inventor]
CS ASSIGNEE: Dow AgroSciences LLC
PI US 6717035 20040406
SO Official Gazette of the United States Patent and Trademark Office Patents, (Apr 6 2004) Vol. 1281, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file.
ISSN: 0098-1133 (ISSN print).
DT Patent
LA English
ED Entered STN: 6 May 2004
Last Updated on STN: 6 May 2004
AB Novel polynucleotide sequences that encode insect toxins **TcdA** and TcbA have base compositions that differ substantially from the native genes, making them more similar to plant genes. The new sequences are suitable for use for high expression in both monocots and dicots. Transgenic plants with a genome comprising the nucleic acid of SEQ ID NO:4 are insect resistant.

L3 ANSWER 28 OF 202 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:650083 CAPLUS
DN 141:186449
TI Combinations of insecticidal proteins from Xenorhabdus, Photorhabdus, and Paenibacillus for broad range control of insects
IN Hey, Timothy D.; Schleper, Amanda D.; Bevan, Scott A.; Bintrim, Scott B.; Mitchell, Jon C.; Li, Ze Sheng; Ni, Weiting; Zhu, Baolong; Merlo, Donald J.; Apel-Birkhold, Patricia C.
PA Dow Agrosciences LLC, USA
SO PCT Int. Appl., 368 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004067727	A2	20040812	WO 2004-US394	20040107

WO 2004067727 A3 20050317
WO 2004067727 C1 20050818
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
CA 2514041 AA 20040812 CA 2004-2514041 20040107
US 2004208907 A1 20041021 US 2004-754115 20040107
EP 1585819 A2 20051019 EP 2004-700609 20040107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI US 2003-441723P P 20030121
WO 2004-US394 W 20040107

AB Mixts. of bacterial toxin complex (TC) proteins from Xenorhabdus, Photorhabdus, and Paenibacillus, can be used in combination with one another and can act act synergistically to improve insecticidal activity. The TC proteins from these genera act against different ranges of insects, therefore, these mixts. show increased effectiveness against a broader range of insects than the individual proteins. Certain preferred combinations of TC proteins are disclosed. Synergism between proteins from different sources was found during coexpression of cloned genes in an Escherichia coli host. Not all combinations were effective, with some showing no activity, but with the addition of an addnl. protein raising mortality in feeding expts. from 0-10% to 80-100%.

L3 ANSWER 11 OF 202 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
AN 2005:165259 BIOSIS
DN PREV200500164562
TI Potentiation and cellular phenotypes of the insecticidal Toxin complexes of Photorhabdus bacteria.
AU Waterfield, N.; Hares, M.; Yang, G.; Dowling, A.; ffrench-Constant, R. [Reprint Author]
CS Ctr Mol Microbiol, Univ Bath, Bath, Avon, BA2 7AY, UK
bssrfc@bath.ac.uk
SO Cellular Microbiology, (March 2005) Vol. 7, No. 3, pp. 373-382. print.
ISSN: 1462-5814 (ISSN print).
DT Article
LA English
ED Entered STN: 27 Apr 2005
Last Updated on STN: 27 Apr 2005
AB The toxin complex (tc) genes of bacteria comprise a large and growing family whose mode of action remains obscure. In the insect pathogen Photorhabdus, tc genes encode high molecular weight insecticidal toxins with oral activity against caterpillar pests. One protein, **TcdA**, has recently been expressed in transgenic plants and shown to confer insect resistance. These toxins therefore represent alternatives to toxins from Bacillus thuringiensis (Bt) for deployment in transgenic crops. Levels of **TcdA** expression in transgenic plants were, however, low and the full toxicity associated with the native toxin was not reconstituted. Here we show that increased activity of the toxin **TcdA1** requires potentiation by either of two pairs of gene products, **TcdB1** and TccC1 or **TcdB2** and TccC3.
Moreover, these same pairs of proteins can also cross-potentiate a second toxin, TcaA1B1. To elucidate the likely functional domains present in these large proteins, we expressed fragments of each 'toxin' or 'potentiator' gene within mammalian cells. Several domains produced abnormal cellular morphologies leading to cell death, while others showed specific phenotypes such as nuclear translocation. Our results prove that the Tc toxins are complex proteins with multiple functional domains. They also show that both toxin genes and their potentiator pairs will need to be expressed to reconstitute full activity in insect-resistant transgenic plants. Moreover, they suggest that the same potentiator pair will be able to cross-potentiate more than one toxin in a single plant.

=> s l1 not Clostridium

L4 17265 L1 NOT CLOSTRIDIUM

=> s tcd? not Clostridium
L5 17265 TCD? NOT CLOSTRIDIUM

=> s tc? and photorhabdus
L6 78 TC? AND PHOTORHABDUS

=> duplicate remove l6
L7 39 DUPLICATE REMOVE L6 (39 DUPLICATES REMOVED)

=> d ti 1-39

L7 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Insecticidal toxin complex fusion proteins and their use in transformation of plants for improved insect resistance

L7 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Use of untranslated regions of the osmotin gene to increase levels of transgene expression in plants

L7 ANSWER 3 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Homologues of insecticidal toxin complex genes in Yersinia enterocolitica biotype 1A and their contribution to virulence.

L7 ANSWER 4 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Potentiation and cellular phenotypes of the insecticidal Toxin complexes of **Photorhabdus** bacteria.

L7 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Insecticidal toxins from **Photorhabdus** and Xenorhabdus

L7 ANSWER 6 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Transgenic plants expressing **photorhabdus** toxin.

L7 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Xenorhabdus toxin complex proteins and genes for pest control

L7 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Combinations of insecticidal proteins from Xenorhabdus, **Photorhabdus**, and Paenibacillus for broad range control of insects

L7 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI DNA sequences from **tcd** genomic region of **Photorhabdus** luminescens and their use for production of recombinant, orally-active insect toxins

L7 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Pesticidal proteins active against Lepidoptera and the genes encoding them from Paenibacillus species

L7 ANSWER 11 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Cloning and heterologous expression of a novel insecticidal gene (**tccC1**) from Xenorhabdus nematophilus strain.

L7 ANSWER 12 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI DNA sequences from **photorhabdus** luminescens.

L7 ANSWER 13 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Transgenic plants expressing **photorhabdus** toxin.

L7 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Immunogenic peptides, encoding polynucleotides, and binding antibodies for identifying immunogenic peptide-based on three dimensional structure

L7 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

TI Insecticidal toxins from **Photorhabdus** and the genes encoding them and their uses

L7 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Site-directed recombinase fusion proteins and corresponding polynucleotides, vectors and kits, and their uses for site-directed DNA recombination

L7 ANSWER 17 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Using a DNA microarray to investigate the distribution of insect virulence factors in strains of **Photorhabdus** bacteria.

L7 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Bacterial detection of the toxicity of dioxins, polychlorinated biphenyls, and polybrominated diphenyl ethers

L7 ANSWER 19 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Insect resistance conferred by 283-kDa **Photorhabdus** luminescens protein **Tcd** A in Arabidopsis thaliana.

L7 ANSWER 20 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Specific responses of bacterial cells to dioxins.

L7 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Photorhabdus** luminescens strain W-14 genes **tcdB** and **tccC2**, their DNA sequences and use in production of insecticidal toxins A and B in transgenic plants

L7 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Genomic islands in **Photorhabdus**

L7 ANSWER 23 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Bacterial infection of a model insect: **Photorhabdus** luminescens and Manduca sexta.

L7 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Transgenic plants expressing **Photorhabdus** toxins **TcdA** and **TcbA** for increased resistance to insect pests

L7 ANSWER 25 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Measuring virulence factor expression by the pathogenic bacterium **Photorhabdus** luminescens in culture and during insect infection.

L7 ANSWER 26 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Oral toxicity of **Photorhabdus** luminescens W14 toxin complexes in Escherichia coli.

L7 ANSWER 27 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI The **tc** genes of **Photorhabdus**: A growing family.

L7 ANSWER 28 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Cytopathic effect of SpvB, a Salmonella plasmid virulence protein, is mediated by its inherent ADP-ribosyltransferase activity.

L7 ANSWER 29 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI A genomic sample sequence of the entomopathogenic bacterium **Photorhabdus** luminescens W14: Potential implications for virulence.

L7 ANSWER 30 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Novel insecticidal toxins from nematode-symbiotic bacteria.

L7 ANSWER 31 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI The predicted structure of photopexin from **Photorhabdus** shows the first haemopexin-like motif in prokaryotes.

L7 ANSWER 32 OF 39 CABA COPYRIGHT 2006 CABI on STN
TI Insecticidal toxins from the bacterium **Photorhabdus** luminescens: gene cloning and toxin histopathology.

L7 ANSWER 33 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Secreted proteases from **Photorhabdus** luminescens: Separation of the extracellular proteases from the insecticidal **Tc** toxin complexes.

L7 ANSWER 34 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Insecticidal toxins from the bacterium **Photorhabdus** luminescens: Gene cloning and toxin histopathology.

L7 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Photorhabdus** toxins: novel biological insecticides

L7 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI Insecticidal protein toxins from **Photorhabdus** luminescens

L7 ANSWER 37 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI A novel insecticidal toxin from **Photorhabdus** luminescens, toxin complex a (**Tca**), and its histopathological effects on the midgut of Manduca sexta.

L7 ANSWER 38 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Insecticidal toxins from the bacterium **Photorhabdus** luminescens.

L7 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
TI An insecticidal protein toxin complex from **Photorhabdus** and cloning and expression of cDNAs encoding the components

=> s l5 and plant
L8 464 L5 AND PLANT

=> duplicate remove l8
L9 362 DUPLICATE REMOVE L8 (102 DUPLICATES REMOVED)

=> d ti 1-10

L9 ANSWER 1 OF 362 CAPLUS COPYRIGHT 2006 ACS on STN
TI Insecticidal toxin complex fusion proteins and their use in transformation of plants for improved insect resistance

L9 ANSWER 2 OF 362 CAPLUS COPYRIGHT 2006 ACS on STN
TI Use of untranslated regions of the osmotin gene to increase levels of transgene expression in plants

L9 ANSWER 3 OF 362 CAPLUS COPYRIGHT 2006 ACS on STN
TI Parallel synthesis of a library of acylsemicarbazides using a solution-phase one-pot method and their evaluation as crop-protection agents

L9 ANSWER 4 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Cloning of resistance gene analogs located on the alien chromosome in an addition line of wheat-Thinopyrum intermedium.

L9 ANSWER 5 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Black tea theaflavins suppress dioxin-induced transformation of the aryl hydrocarbon receptor.

L9 ANSWER 6 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Serum dioxin concentrations and age at menopause.

L9 ANSWER 7 OF 362 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 4
TI Bisindigotin, a **TCDD** antagonist from the Chinese medicinal herb

Isatis indigotica.

L9 ANSWER 8 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI The **plant** flavonoid, quercetin, reduces some forms of dioxin toxicity by mechanism distinct from aryl hydrocarbon receptor activation, heat-shock protein induction and quenching oxidative stress.

L9 ANSWER 9 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Suppressive effects of caraway (Carum carvi) extracts on 2,3,7,8-tetrachloro-dibenzo-p-dioxin-dependent gene expression of cytochrome P450 1A1 in the rat H4IIE cells.

L9 ANSWER 10 OF 362 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
TI Potentiation and cellular phenotypes of the insecticidal Toxin complexes of Photorhabdus bacteria.

=> s l9 and insect?
L10 28 L9 AND INSECT?

=> d ti 1-28

L10 ANSWER 1 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Potentiation and cellular phenotypes of the **insecticidal** Toxin complexes of Photorhabdus bacteria.

L10 ANSWER 2 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Transgenic plants expressing photorhabdus toxin.

L10 ANSWER 3 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Transgenic plants expressing photorhabdus toxin.

L10 ANSWER 4 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Human-dominated ecosystems and restoration ecology: Seveso today.

L10 ANSWER 5 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Evaluation of dioxin mobility and spoils leaching in a surface coal mine reclaimed with bleached kraft pulp and paper mill biosolids.

L10 ANSWER 6 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Exposure to polychlorinated dioxins and furans (PCDD/F) and mortality in a cohort of workers from a herbicide-producing **plant** in Hamburg, Federal Republic of Germany.

L10 ANSWER 7 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI HIGH-AFFINITY JUVENILE HORMONE BINDING TO FAT BODY CYTOSOLIC PROTEINS OF THE BOLLWORM HELIOTHIS-ZEA CHARACTERIZATION AND INTERACTION WITH ALLELOCHEMICALS AND XENOBIOTICS.

L10 ANSWER 8 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI THE GENO TOXIC EFFECTS OF 2 4 5-T.

L10 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Parallel synthesis of a library of acylsemicarbazides using a solution-phase one-pot method and their evaluation as crop-protection agents

L10 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Insecticidal** toxin complex fusion proteins and their use in transformation of plants for improved **insect** resistance

L10 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Use of untranslated regions of the osmotin gene to increase levels of transgene expression in plants

L10 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN

TI Combinations of **insecticidal** proteins from Xenorhabdus, Photorhabdus, and Paenibacillus for broad range control of **insects**

L10 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI DNA sequences from **tcd** genomic region of Photorhabdus luminescens and their use for production of recombinant, orally-active **insect** toxins

L10 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Insect** resistance conferred by 283-kDa Photorhabdus luminescens protein **TcdA** in Arabidopsis thaliana

L10 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Photorhabdus luminescens strain W-14 genes **tcdB** and tccC2, their DNA sequences and use in production of **insecticidal** toxins A and B in transgenic plants

L10 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Utilization of a thermochemical process for destroying hazardous chemicals in sediment from harbor dredging operations

L10 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Transgenic plants expressing Photorhabdus toxins **TcdA** and TcbA for increased resistance to **insect** pests

L10 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Novel methods for in vivo identification of enzyme inhibitors from random peptide-chymotrypsin inhibitor 2A (CI-2A) fusion library and their use in drug screening

L10 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Exposure to HCH and its effects on mortality. Observations in a cohort of former employees of a **plant** producing **insecticides** and herbicides in Hamburg

L10 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Insecticidal** protein toxins from Photorhabdus luminescens

L10 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Manufacture of **plant** protection agents. What are the environmental problems?

L10 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
TI Persistence, bioaccumulation, and toxicology of **TCDD** in an ecosystem treated with massive quantities of 2,4,5-T herbicide

L10 ANSWER 23 OF 28 CABA COPYRIGHT 2006 CABI on STN
TI Neurophysiological studies of flight-related density-dependent phase characteristics in locusts.

L10 ANSWER 24 OF 28 CABA COPYRIGHT 2006 CABI on STN
TI Neural correlates to flight-related density-dependent phase characteristics in locusts.

L10 ANSWER 25 OF 28 CABA COPYRIGHT 2006 CABI on STN
TI **Insecticidal** toxins from the bacterium Photorhabdus luminescens: gene cloning and toxin histopathology.

L10 ANSWER 26 OF 28 CABA COPYRIGHT 2006 CABI on STN
TI Pesticide induced biochemical changes in terrestrial **insects**, benthos and fish as markers of contamination of soils and waters.

L10 ANSWER 27 OF 28 CABA COPYRIGHT 2006 CABI on STN
TI Persistence, bioaccumulation and toxicology of **TCDD** in an ecosystem treated with massive quantities of 2,4,5-T herbicide.

L10 ANSWER 28 OF 28 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2006) on STN
TI VEGETATION MANAGEMENT WITH HERBICIDES IN THE EASTERN REGION.

=> d bib abs 25 21 20 15 14 1

L10 ANSWER 25 OF 28 CABA COPYRIGHT 2006 CABI on STN
AN 2002:22240 CABA
DN 20013072531
TI **Insecticidal** toxins from the bacterium Photorhabdus luminescens: gene cloning and toxin histopathology
AU Bowen, D.; Blackburn, M.; Rocheleau, T. A.; Andreev, O.; Golubeva, E.; Ffrench-Constant, R. H.; Smits, P. H. [EDITOR]
CS Department of Entomology, University of Wisconsin-Madison, Madison, WI 53706, USA.
SO Bulletin OILB/SROP, (2000) Vol. 23, No. 2, pp. 97-99. 16 ref.
Publisher: International Organization for Biological Control of Noxious Animals and Plants (OIBC/OILB), West Palaearctic Regional Section (WPRS/SROP). Dijon
Price: Journal article; Conference paper .
Meeting Info.: Proceedings of the 7th European meeting of the IOBC/WPRS Working group: Insect pathogens and insect parasitic nematodes, entitled 'Capturing the potential of biological control', held in Vienna, Austria from March 22-26, 1999.
CY France
DT Journal
LA English
ED Entered STN: 20020207
Last Updated on STN: 20020207
AB Four toxin complexes were from P. luminescens culture were purified, and the toxin complex-encoding loci, tca, tcb, tcc and **tcd**, were cloned. Genetic knockout of either tca or **tcd** residues reduced the oral toxicity of these toxins to Manduca sexta, and knockout of both loci eliminated the activity of the toxins. In bioassays, the purified Tca was specifically active in the **insect** midgut. These toxins may be useful alternatives to other active bacterial protein toxins.

L10 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1988:225994 CAPLUS
DN 108:225994
TI Manufacture of **plant** protection agents. What are the environmental problems?
AU Foraboschi, Franco P.
CS Fac. Ing., Univ. Bologna, Bologna, Italy
SO ICP (1988), 16(4), 35-42
CODEN: ICPDDL; ISSN: 0390-2358
DT Journal; General Review
LA Italian
AB A review, with 73 refs., on health hazards in the manufacture of chlorinated and phosphorated **insecticides** and the environmental effects of their release, including the **TCDD** pollution at Seveso, Italy.

L10 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:165497 CAPLUS
DN 128:214446
TI **Insecticidal** protein toxins from Photorhabdus luminescens
IN Ensign, Jerald C.; Bowen, David J.; Petell, James; Fatig, Raymond; Schoonover, Sue; Ffrench-Constant, Richard H.; Rocheleau, Thomas A.; Blackburn, Michael B.; Hey, Timothy D.; Merlo, Donald J.; Orr, Gregory L.; Roberts, Jean L.; et al.
PA Dow Agrosciences LLC, USA; Wisconsin Alumni Research Foundation
SO PCT Int. Appl., 321 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9808932	A1	19980305	WO 1997-US7657	19970505
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	WO 9717432	A1	19970515	WO 1996-US18003	19961106
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2263819	AA	19980305	CA 1997-2263819	19970505
	AU 9728299	A1	19980319	AU 1997-28299	19970505
	EP 970185	A1	20000112	EP 1997-922696	19970505
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9711441	A	20001024	BR 1997-11441	19970505
	JP 2000515024	T2	20001114	JP 1998-511612	19970505
	TW 509722	B	20021111	TW 1997-86112391	19970828
	MX 9901931	A	20000731	MX 1999-1931	19990226
	JP 2004089189	A2	20040325	JP 2003-197785	20030716
	JP 3657593	B2	20050608		
PRAI	US 1996-705484	A	19960828		
	US 1996-743699	A	19961106		
	WO 1996-US18003	A	19961106		
	US 1995-7255P	P	19951106		
	US 1996-608423	A	19960228		
	JP 1997-518369	A3	19961106		
	WO 1997-US7657	W	19970505		

AB Proteins from the genus Photorhabdus are toxic to **insects** upon exposure. Photorhabdus luminescens (formerly Xenorhabdus luminescens) have been found in mammalian clin. samples and as a bacterial symbiont of entomopathogenic nematodes of genus Heterorhabditis. The native toxins are protein complexes that are produced and secreted by growing bacteria. The protein complexes, with a mol. size of .apprx.1000 kDa, can be separated by SDS-PAGE gel anal. into numerous component proteins. The toxins contain no hemolysin, lipase, type C phospholipase, or nuclease activities, but exhibit significant toxicity upon exposure administration to a number of **insects**. PCR cloning yielded gene sequences (tca, tcb, tcc, and **tcd** regions) encoding the **insecticidal** toxins from P. luminescens strain W-14 and several other strains. These protein toxins can be applied to, or genetically engineered into, **insect** larvae food and plants for **insect** control.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:466761 CAPLUS
DN 137:42657
TI Photorhabdus luminescens strain W-14 genes **tcdB** and tccC2, their DNA sequences and use in production of **insecticidal** toxins A and B in transgenic plants
IN French-Constant, Richard H.; Bowen, David; Rocheleau, Thomas A.; Waterfield, Nicholas R.
PA Wisconsin Alumni Research Foundation, UK; University of Bath
SO U.S. Pat. Appl. Publ., 40 pp.
CODEN: USXXCO

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002078478	A1	20020620	US 2001-817514	20010326
	US 6639129	B2	20031028		
	US 2005251878	A1	20051110	US 2003-647956	20030826
PRAI	US 2000-191806P	P	20000324		
	US 2001-817514	A3	20010326		

AB The invention provides DNA mols. for genes **tcdB** and tccC2 from Photorhabdus luminescens strain W-14, which encode components of a toxin complex previously shown to have oral toxicity against **insects**. The invention also provides for the use of said DNA mols., along with DNA mols. for genes **tcdA** or tcbA, for recombinant production of **insecticidal** toxins A and B in heterologous hosts, such as plants. The invention further provides transgenic plants, such as rice, maize, tobacco and cotton, containing said P. luminescens **insecticidal** toxin genes **tcdB** and tccC2, and seed or progeny of seed from said transgenic plants. Finally, the invention discloses the DNA and amino acid sequences of P. luminescens gene **tcdB** and tccC2 toxin components, as well as the amino acid sequences of gene **tcdA** and tcbA toxin components. The invention discussed how said genes, methods and transgenic plants could be used to enhance resistance to **insects** in the field. The invention also discussed that coexpression of **tcdB** and tccC2 with **tcdA** or tcbA in heterologous hosts results in enhanced levels of oral **insect** toxicity.

L10 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:764632 CAPLUS
DN 140:1884
TI **Insect** resistance conferred by 283-kDa Photorhabdus luminescens protein **TcdA** in Arabidopsis thaliana
AU Liu, Dong; Burton, Stephanie; Glancy, Todd; Li, Ze-Sheng; Hampton, Ronnie; Meade, Thomas; Merlo, Donald J.
CS Dow AgroSciences LLC, Indianapolis, IN, 46268, USA
SO Nature Biotechnology (2003), 21(10), 1222-1228
CODEN: NABIF9; ISSN: 1087-0156
PB Nature Publishing Group
DT Journal
LA English
AB The **tcdA** gene of Photorhabdus luminescens encodes a 283-kDa protein, toxin A, that is highly toxic to a variety of **insects**, including some agriculturally important pests. We tested the efficacy of transgenic toxin A in Arabidopsis thaliana for control of feeding **insects**. Plants with toxin A expression above about 700 ng/mg of extractable protein were highly toxic to tobacco hornworm (Manduca sexta). Toxin A isolated from transgenic plants also strongly inhibited growth of the southern corn rootworm (Diabrotica undecimpunctata howardi). Addition of 5' and 3' untranslated regions of a tobacco osmotin gene (osm) increased toxin A production 10-fold and recovery of **insect**-resistant lines 12-fold. In the best line, high toxin A expression and **insect** resistance were maintained for at least five generations in all progeny. The intact **tcdA** mRNA represents the largest effective transgenic transcript produced in plants to date. These results may open a new route to transgenic pest control in agriculture.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 1 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 2005:165259 BIOSIS
DN PREV200500164562
TI Potentiation and cellular phenotypes of the **insecticidal** Toxin complexes of Photorhabdus bacteria.
AU Waterfield, N.; Hares, M.; Yang, G.; Dowling, A.; ffrench-Constant, R.

[Reprint Author]
CS Ctr Mol Microbiol, Univ Bath, Bath, Avon, BA2 7AY, UK
bssrfc@bath.ac.uk
SO Cellular Microbiology, (March 2005) Vol. 7, No. 3, pp. 373-382. print.
ISSN: 1462-5814 (ISSN print).
DT Article
LA English
ED Entered STN: 27 Apr 2005
Last Updated on STN: 27 Apr 2005
AB The toxin complex (tc) genes of bacteria comprise a large and growing family whose mode of action remains obscure. In the **insect** pathogen Photorhabdus, tc genes encode high molecular weight **insecticidal** toxins with oral activity against caterpillar pests. One protein, **TcdA**, has recently been expressed in transgenic plants and shown to confer **insect** resistance. These toxins therefore represent alternatives to toxins from Bacillus thuringiensis (Bt) for deployment in transgenic crops. Levels of **TcdA** expression in transgenic plants were, however, low and the full toxicity associated with the native toxin was not reconstituted. Here we show that increased activity of the toxin **TcdA1** requires potentiation by either of two pairs of gene products, **TcdB1** and TccC1 or **TcdB2** and TccC3. Moreover, these same pairs of proteins can also cross-potentiate a second toxin, TcaA1B1. To elucidate the likely functional domains present in these large proteins, we expressed fragments of each 'toxin' or 'potentiator' gene within mammalian cells. Several domains produced abnormal cellular morphologies leading to cell death, while others showed specific phenotypes such as nuclear translocation. Our results prove that the Tc toxins are complex proteins with multiple functional domains. They also show that both toxin genes and their potentiator pairs will need to be expressed to reconstitute full activity in **insect**-resistant transgenic plants. Moreover, they suggest that the same potentiator pair will be able to cross-potentiate more than one toxin in a single **plant**.